

RESIDENTIAL COMPONENT

THE PROBLEM

Pollutants washed into our streets and gutters flow unfiltered and untreated into rivers and the bay. Detergents, pesticides, animal waste, and toxic materials that are washed into the street and gutter can harm wildlife habitat and your family when using local beaches and the bay. Many residential activities seem harmless, and most people habitually and routinely conduct such activities without much consideration to their effect on the environment and water quality. However, due to increased population density in urban areas, effects of such activities are accumulated and major problems are created in downstream water bodies. It is up to us to reconsider the impact that our actions will have on the environment. Some residential activities that can adversely impact quality of urban runoff and natural water resources include:

- Auto maintenance and washing – Oil, grease, radiator fluid, transmission fluid, and detergent are among pollutants generated by leaking cars, or when maintaining or washing automobiles at home.
- Home repair and remodeling – Sediments, stucco, cement paste, paint, wood shavings and dust are generated from these activities, and may end up in the storm drain systems.
- Landscaping, gardening, and pest control – Wastes from yard work are among the many common storm water pollutants that can degrade water quality. Grass clippings, leaves, tree trimmings, sediment, fertilizers, pesticides, and herbicides are generated by yard work activities, and can easily be washed into storm drain systems by rain or irrigation water. Over-watering is a major contributor to water quality degradation, since over-watering washes fertilizers, pesticides, and herbicides into storm drain systems, making it necessary to apply such chemicals more frequently and at higher rates.
- Pet care – Pet waste, if left on lawns, beaches, trails and sidewalks is washed into storm drains during rain events or due to over-watering lawns and landscaping. These wastes contain bacteria, parasites, and viruses that end up in the rivers, the bay, and the ocean. Recent studies have shown that dogs and cats are sources of fecal contamination at local beaches that result in beach closures, impacting the regions economy. Also pet grooming is a source of urban runoff pollution, and should be done in areas where water can be discharged to the sanitary sewer rather than storm drain systems.
- Pool and spa maintenance – Swimming pool and spa water is usually chlorinated to minimize spread of infectious diseases. Other chemicals such as copper-based algaecides are sometimes used to keep growth of algae under control. However, these chemicals can cause major water quality problems if allowed to enter water bodies such as creeks, rivers, bays, and the ocean. Most of these chemicals, individually or when combined with other chemicals, are highly toxic to living organisms and animals, including fish and other marine creatures.
- Storage of hazardous materials – Common household hazardous materials include: all purpose cleaners, solvents, automotive products, paint (latex and oil), pesticides, pool and

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spa chemicals, aerosols, fluorescent light tubes and ballasts, batteries (home and car) and fuels. If stored or left outdoors, such hazardous materials come into contact with rainwater or irrigation water, or are otherwise washed into storm drainage systems. Household hazardous materials are very toxic to most living organisms and animals living on land or in water.

- Cigarette smoking – Cigarette smoking is not only harmful to your health, but can pollute the environment. Each year, many thousands of cigarette butts that are thrown onto the ground are washed to storm drain systems and end up in our streams, bays, and beaches. They degrade natural resources, adversely impact local economy, and can harm aquatic plant and animals.
- Waste disposal – Improper disposal of waste can easily cause accumulation of trash and debris in the storm drain systems. Trash that is casually thrown on the street ends up in the creeks, rivers, bays, and the ocean. A visit to any storm drain outfall after a rain event can show how much trash and debris can accumulate from a small urban drainage basin. The presence of trash and debris in our recreational areas, water bodies, and other natural resources:
 - Degrades neighborhoods, towns, and cities
 - Adversely impacts the local economy
 - Wastes tax dollars in cleanup costs
 - Destroys fish nursery areas
 - Disturbs animal habitats, and
 - Clouds the water so that sunlight can not reach aquatic plants
- Cooking oil and grease disposal – If cooking oil, grease, or fat trimmings from meat are thrown in the kitchen sink drain, these materials tend to stick to the inside of sewer pipes, gradually blocking the pipes, and causing sewage backup and overflow. Sewage overflows that enter storm drain systems contain high levels of bacteria and other pollutants, and are the main cause of beach closures.

THE SOLUTION

There are ways you can prevent storm water pollution. They are called **Best Management Practices**, also referred to as BMPs. Best Management Practices are simple and inexpensive ways to stop pollution at the sources. Each of us can and should participate in implementing Best Management Practices during our routine residential activities. It is good for the environment and saves money. Some residential Best Management Practices are described in the Residential BMPs section of the following web page.

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[Best Management Practices](#)



Only Rain
Down the
Storm Drain

Storm Water Management
Program



Protect
our
water,
health,
and
wildlife



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awn & Garden

Waste from yard work is among the many common storm water pollutants that can degrade water quality.

OVER-WATERING

Over-watering washes fertilizers, pesticides, and herbicides into storm drains. These chemicals kill garden invaders, but when washed into local waters, they poison fish and contaminate water.

CHEMICALS

The chemical approach to pest control often causes more problems than it solves. Over 90% of lawn and garden insects are not harmful. Many gardeners use pesticides, herbicides, and fertilizers more than 20 times the rate necessary, greatly increasing polluted runoff.

CHEMICAL ALTERNATIVES

- Don't kill insects that aren't harmful
- Use less toxic products
 - Dehydrating dusts (such as silica gel)
 - Insecticidal soaps
 - Boric acid powder
 - Horticultural oils
 - Pyrethrin-based or bacterial insecticides
 - Organic or nontoxic fertilizers
- Use predatory insects when possible
- Use pesticides specially designed to control your pest (see label)
- Always read the label & use only as directed



ORGANIC WASTES

Grass clippings, leaves, and tree trimmings swept or blown into streets and gutters carry chemicals into our waterways and can clog catch basins, increasing the risk of flooding. Once this debris settles into water bodies, it begins to decompose, absorbing the oxygen fish need to survive.

Soil and dirt washed from yards can also harm aquatic life by penetrating the gills of fish, blocking light transmission, lowering water temperatures, and inhibiting photosynthesis.

LANDSCAPING TIPS

- Schedule big projects for dry weather.
- Use plants that require less water.
- Prevent erosion by planting fast-growing grasses to bind the soil.
- Store stockpiles under plastic tarps to protect them from wind and rain.
- Do not over-water.
- Use drip irrigation, soaker hoses, or micro-spray systems.
- Use curbside yard waste recycling or take clippings to a landfill/composting.
- Do not blow or rake leaves into the street or gutter.
- Avoid hosing down the pavement.
- Do not overfertilize or apply chemicals near ditches, streams or bays.
- Store pesticides, fertilizers & other chemicals in a covered area.

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Pet Waste

Recent studies show that pet waste significantly contributes to bacterial contamination after a storm. When it rains, pet waste deposited on lawns, beaches, trails and sidewalks washes into storm drains. The pathogens contained in the waste (bacteria, parasites, and viruses) flow directly into San Diego Bay and the ocean, where they can harm human health and the environment.

Decomposing waste uses most of the oxygen in water, leaving little for fish and plant life.

PET OWNER TIPS for Dogs

- Always clean up after your dog
- Dispose of waste in the toilet or a plastic bag before placing it in the trash
- Carry extra bags when walking the dog and make them available to other dog owners
- Use the pet waste bag dispensers at selected locations
- Spread the word: encourage others to clean up after pets

PET OWNER TIPS for Cats

- Place cat waste and litter in a plastic bag before placing in the trash
- Pick up after outdoor cats

Other TIPS

- When choosing a pet, consider an indoor cat; they usually live long, healthy lives & don't harm wildlife or contribute to storm water pollution.
- If pets are fed a vegetarian diet, waste can be composted and used on the lawn or garden.
- Deceased pets or animals should not be placed in the trash. Call your vet or the Animal Care Facility at (619) 691-5123.



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Pool & Spa Cleaning

Commercial and residential pool and spa cleaning services can help prevent storm water pollution by eliminating illegal discharges. These discharges can become water quality problems.

MAINTAINING POOLS & SPAS

Prevent algae problems with regular cleaning, adequate chlorine levels, and well-maintained water filtration and circulation systems. Avoid using copper-based algaecides. Follow the instructions on pool chemical labels and use only the amount recommended.



DRAINING POOLS & SPAS

When emptying a pool or spa, allow chlorine to dissipate for 5 to 7 days. Then recycle dechlorinated water by draining it gradually onto a landscaped area.

Pool or spa water may be pumped to the street only if it is less than 1 part per million (ppm) chlorine and cannot carry debris or vegetation with it. Also, the water flow must be controlled to prevent erosion. When discharging pool water to the sanitary sewer, prevent backflow by maintaining an 'air gap' between your discharge line and the sewer line (i.e., do not seal the connection between hose and sewer line). Call your local wastewater agency on flow rate restrictions, and handling special cleaning waste, like 'acid wash'.

FILTER CLEANING

- Never clean filters in streets or near storm drains.
- Rinse cartridge filters onto a dirt area and spade filter residue into soil.
- Dispose of spent diatomaceous earth in the garbage.

If you plan to discharge pool water, 'acid wash', or diatomaceous earth filter backwash (if no suitable dirt area exists) to the sewer system, please call the City of Chula Vista Wastewater Section at: (619) 397-6116.



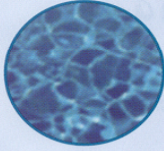
Numbers To Call:

More Information: (619) 397-6111

Reporting Violations: (800) 237-2583



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Storm Water Pollution Prevention

The storm water conveyance systems (storm drains, gutters, concrete channels, etc.) are designed to prevent flooding. Storm drains are not connected to the sanitary sewer, and carry pollution and contaminants directly to creeks, rivers, the bay, and the ocean where people swim and fish. Most of these chemicals are also toxic to the aquatic life and other wildlife living near the water.

In addition to causing beach closures, this contamination can make people sick with sore throats, intestinal problems, rashes, nausea, and eye and ear infections.

Storm water pollution is anything that mixes with rainwater or is dumped or discharged into storm drainage systems, including oil and automotive fluids, paint, construction debris, yard and pet wastes, pesticides, litter, pool chemicals, including 'acid wash' and chlorinated pool water. It is illegal to discharge polluted water including filter backwash and chemicals to the street, gutter, or storm water conveyance systems.

Next time it rains, take a look at what's running off the streets, into the gutter, and down the storm drains. Clean rainwater is quickly transformed into an oily, dirty mixture. The bacteria and viruses are invisible in the runoff, but they're there!

Help keep our water clean.

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Referra Numbers

Storm Water Program General Info: **(619) 397-6111**

Reporting Violations: **(800) 237-2583**

Chula Vista Public Works Operations: **(619) 397-6000**

Household Hazardous Waste Collection: **(619) 237-2583**

City of Chula Vista Wastewater Section: **(619) 397-6116**



ENGINEERING DEPARTMENT

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